

The Imminent Transit of Venus

By Greg Morgan



On May 30, 2004, Venus was only 12 degrees from the Sun making observations and imaging potentially very dangerous. Under these conditions, direct sunlight was impinging upon a portion of the primary mirror even with the dew shield / sun shade. Shown here, Venus is only 2.4% illuminated. The planet was diving into the West toward its imminent rendezvous with the Sun. It would only take an additional 8 days and 3 hours before Venus would begin its historic transit on June 8, 2004. Even though it glowed brilliantly at a magnitude of -4.1, it was difficult to pick out during daylight hours due to the glair of the Sun. The hot daylight seeing conditions were easily frozen with the fast exposures made by the Nikon D-70 DSLR. This negative grayscale image is a single 1/250 second exposure using eyepiece projection at f/44 several hours prior to sunset. Venus fills a good portion of this full-frame, 7.2 x 4.8 arc minute, image through the 10 inch LX-200. Venus's apparent diameter was 55.8 arc seconds, only 1 arc second smaller than during the transit.